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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,367

02/23/2004

Thomas Rausch

P2107-248

8977

2352

7590

02/25/2008

OSTROLENK FABER GERB & SOFFEN

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NEW YORK, NY 100368403

EXAMINER

KALLIS, RUSSELL

ART UNIT

PAPER NUMBER

1638

MAIL DATE

DELIVERY MODE

02/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/785,367

**Applicant(s)**

RAUSCH, THOMAS

**Examiner**

RUSSELL KALLIS

**Art Unit**

1638

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-5 and 8-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5 and 8-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/2007 has been entered.

Claims 2, 6-7 have been cancelled. Claims 16-30 are newly added. Claims 1, 3-5, 8-30 are pending and examined.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

Claims 1, 3-5, 8-15 remain and new claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is maintained for reasons of record in the office action filed 10/02/2006 and 7/05/2007. Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

Applicant's remarks are largely duplicative of previously filed remarks. Applicant's amendment to the claims to recite 80% identity to an endogenous sequence does not overcome the written description rejection of the previous office actions for the same reasons of record namely that there is no sequence provided for comparison, there are not a representative number of sequences and Applicant's have not provided adequate structural features to define the genus. Applicant's reliance upon statements (response page 9-10) such as one of ordinary skill would find common structural features to members of a genus of endogenous apoplastic invertase inhibitor proteins expressed during seed development and the declaration of Dr. Raush as evidence fails to show possession of the invention for the claimed priority date.

Claims 1, 3-5, 8-15 remain and new claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a process for producing a transgenic plant where the seed have an increased amount of reserves by transforming with the isolated endogenous apoplastic invertase inhibitor coding sequence in sense orientation, bearing seed with increased reserve content, does not reasonably provide enablement for a process of inhibiting invertase in a plant by transforming the plant with a sequence having 80% sequence identity to an apoplastic invertase inhibitor coding sequence expressed during seed development in flowers with young ovules. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. This rejection is maintained for reasons of record in the office action filed 10/02/2006 and 7/05/2007. Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

Applicant asserts that one of ordinary skill could isolate the DNA sequences recited in the claims with guidance from Applicant's specification (response page 18). Applicant's remarks are largely duplicative of previously filed remarks. Applicant's amendment to the claims to recite 80% identity to an endogenous sequence does not overcome the enablement rejection of the previous office actions for the same reasons of record namely, Applicant has not provided an enabling disclosure for sequences that have 80% identity to any endogenous apoplastic invertase inhibitor coding sequence from any plant. The declaration of Dr. Rausch entirely relies upon evidence discovered after the effective priority date of the foreign patent filing of 8/12/1998 and does not demonstrate possession at the time of filing. Furthermore, See Declaration in article of Link *et al.* FEBS Letters (2004, Vol. 573) p. 107 col. 2 lines 5-7; epub date, 3 August 2004 and the concluding remarks in Hothorn M. *et al.* The Plant Cell; 2004 December, Vol. 16, pp. 3437-3447; that states clearly for the record that Applicant or the art had not even at the time of the instant filing resolved the structure function relationship among the PMEI-related proteins. Applicant's reliance upon the argument that standard techniques are all that was required to achieve the knowledge required to practice the invention does not take into account that the isolation and sequencing of the PMEI-RP as well as the crystal structure of the tobacco isoform Nt-CIF was required to draw the conclusions to adequately practice the invention as broadly claimed which was not available to one of ordinary skill, but rather well outside their reach at the time of the effective priority date.

Claims 1, 3-5, 8-15 remain and new claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Dependent claims are included in all rejections. This rejection is maintained for reasons of record in the office action filed 10/02/2006 and 7/05/2007. Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

Applicant asserts that amending the claim to recite 80% identity to coding sequence of an endogenous invertase inhibitor further clarifies claim 1 and 16 (response page 11).

This is not found persuasive because the term "80% sequence identity" in claim 1 and 16 is a relative term that renders the claim indefinite. The term "80% sequence identity" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claim is indefinite because it claims percent identity to sequences, the identities of which are not disclosed (i.e. a sequence identifier), and thus there is no measure of the metes and bounds of 80% sequence identity. Furthermore, it is indefinite because it refers to an endogenous sequence which is something that has not been isolated.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kallis whose telephone number is (571) 272-0798. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Russell Kallis/  
Primary Examiner, Art Unit 1638  
February 15, 2008

**Application Number****Application/Control No.**

10/785,367

**Applicant(s)/Patent under  
Reexamination**

RAUSCH, THOMAS

**Examiner**

RUSSELL KALLIS

**Art Unit**

1638